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26092 7590 03/21/2008 KYLE W. ROST 5490 S. AUTUMN CT. GREENWOOD VILLAGE, CO 80111				
EXAMINER KEATON, SHERROD L.				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/707,918

**Applicant(s)**

SIEGEL ET AL.

**Examiner**

Sherrod Keaton

**Art Unit**

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**Period for Reply** -- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5, 22, 23, 29, 32 and 40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 22, 23, 29, 32 and 40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This action is in response to the original filing of 1-9-2008. Claims 1-5, 22, 23, 29, 32, and 40 are pending and have been considered below:

#### ***Double Patenting Rejection Withdrawn***

1. The double patenting rejection is withdrawn in light of the amendment.

#### ***Claim Objections***

2. Claims 1 and 22 are objected to because of the following informalities: “,”. The comma in the claim causes the claim to read grammatically incorrect. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1 and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims refer to a "first connection" and a "second session connection", and is considered indefinite because examiner is not clear if there are 2 connections or 2 session connections. Further the claim refers to "the session connection", again examiner is not clear if applicant is referring to the second connection or a first session connection. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-4, 6 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooke Jr. et al ("Cooke" 6574629 B1).

**Claim 1:** Cooke discloses a system, method and software for managing diagnostic digital images (Column 6, Lines 1-16) comprising:

An image host operable to store said digital images and an image directory for said digital images at a first tier (Column 2, Lines 19-32), The archive station holds all the

different files and allows user to retrieve specific images, like searching through the directory.

a catalog service operable to store an image record for each said digital image at a second tier independent from said first tier (Column 2, Lines 19-32),

a user workstation having an input device and a display device, and operable with a graphical user interface at a third tier, said user interface being coupled to said image host via a first connection to receive digital images and to said catalog service over a second, session connection independent of said first connection to receive image records (Column 7, Lines 34-40; Column 11, Lines 37-67), They show multiple reviewing stations and multiple viewing options therefore providing a plurality of graphical user interfaces to be used with the reviewing stations.

said user interface being operable to receive an image copy of a user selected digital image from said image host, to display said image copy on said display device, to receive user selected image manipulations of said selected digital image from said input device, to display said image manipulations with said image copy on said display device, and to automatically add said image manipulations over the session connection to said image record for said selected digital image as recorded manipulations and communicate the added image manipulations to the workstation over the session connection (Column 10, Lines 54-65), (Column 28, Lines 23-34), (Column 11, Lines 37-67; Here are multiple workstations are provided with editing and manipulation options and automatic updates are sent to the stations).

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Cooke does not explicitly disclose that the images are dental, However official notice is taken that the medical images can be utilized in all aspects of medical imaging from large to small operations (i.e. dental office) as referenced by Cooke (Column 6, Lines 14-18). One would have been motivated to provide dental images to meet specific needs of dental professionals.

**Claim 2:** Cooke discloses a system, method and software as in claim 1 above and further discloses wherein said user interface is operable to access said image record of said user selected digital image and to display with said image copy said recorded manipulations from said image record (Column 8, Lines 61-66 and Column 10, Lines 60-65).

**Claim 3:** Cooke discloses a system, method, software as in claim 2 above and further discloses wherein said image manipulations are added as commands and said recorded manipulations from said image record are displayed by executing said commands (Column 11, Lines 36-41 and Column 20, Lines 57-62). Action buttons carry out a command.

**Claim 4:** Cooke discloses a system, method and software as in claim 1 above and further discloses wherein said image manipulations are selected from the group

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consisting of move, zoom-in, zoom-out, rotate, contrast and annotations (Column 11, Lines 37-41, Column 32, Lines 8-20) and (Column 29, Lines 47-48, Column 35, Lines 57-60).

**Claim 6:** Cooke discloses a system as in claim 4 above and further discloses wherein said user interface is operable to display a plurality of contrast controls with said image copy in response to user selection of said contrast manipulation, said contrast controls including a plurality of slider controls each representative of a grayscale range (Column 31, Lines 38-40).

**Claim 23:** Claim 23 is similar in scope and therefore rejected with the same rationale as Claim 1.

7. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cooke Jr. et al ("Cooke" 6574629 B1) in view of Anderson et al ("Anderson" 6154576).

**Claim 29:** Cooke discloses a system and method as in claim 23 above further including a digital image capture device; capturing a digital image with said capture device; storing said digital image on said image host; and creating an image record for said digital image on said catalog service (Column 15, Lines 9-22). Cooke does not disclose using image spoolers, however Anderson discloses using image spoolers for the purpose capturing images (Column 6, Lines 35-45). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to use a

plurality of image spoolers for the plurality of image capturing devices and devices of the system in the modified Cooke. One would have been motivated to use to image spoolers to provide an efficient and accurate way to manage the images.

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cooke Jr. et al ("Cooke" 6574629 B1) in view of Westerman et al ("Westerman" 7197718 B1) and Yanker (5187776).

**Claim 5:** Cooke discloses a system as in claim 4 above but does not explicitly disclose wherein said user interface is operable to select a zoom-in box of selected size from a plurality of available zoom-in box sizes, to display a said selected zoom-in box centered in said image copy in response to said user selection of said zoom-in box size and to display a zoomed in image of said image copy centered around a point in response to user selection of said point after said zoom box is displayed.

However Westerman discloses a zoom in box with different selectable sizes (Figures 3 and 4). Therefore it would have been obvious to one having skill in the art to also provide a zoom-in box in Cooke as taught by Westerman. One would have been motivated to have zoom box to provide improved precise selection of areas of interest.



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Neither Cooke or Westerman disclose centering upon the selection point, but Yanker discloses centering the zoom window around the cursor or selection point (Column 6, Lines 56-65). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to center to point of interest the modified Cooke as taught by Yanker. One would have been motivated to center the point of interest to explicitly and accurately display area which user finds of most importance thereby avoiding a misinterpretation.

9. Claims 22, 32 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooke Jr. et al ("Cooke" 6574629 B1) in view of Echerer (5740267).

**Claim 22:** Cooke discloses a system and method for managing dental diagnostic digital images, comprising:

digital image capture device, which is operable to capture digital images (Column 15, Lines 9-22);

an image host operable to store said digital images at a first tier and an image directory for said digital images (Column 2, Lines 19-32), The archive station holds all the different files and allows user to retrieve specific images, like searching through the directory.

Said image host being in communication and operable to receive and automatically store said digital images (Column 15, Lines 9-22);

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a catalog service operable to store an image record for each said digital image at a second tier that is independent of said first tier (Column 2, Lines 19-32),

said catalog service is in communication with, and is configured to receive notification of said digital images and to create a said image record for each said digital image in response to said notification (Column 15, Lines 9-22; Column 11, Lines 36-43);

a plurality of user workstations each having an input device and a display device and operable with a graphical user interface, wherein said user interface is coupled to said image host by a first connection and to said catalog service by a second, session connection independent of said first connection, said user interface is operable to receive an image copy of a user selected digital image from said image host, to display said image copy on said display device, to receive user selected image manipulations of said selected digital image from said input device, to display said image manipulations with said image copy on and display device, to automatically add over the session connection said image manipulations to said image record for said selected digital image as recorded manipulations (Column 10, Lines 54-65), (Column 28, Lines 23-34) , (Column 11, Lines 37-67; Here are multiple workstations are provided with editing and manipulation options and automatic updates are sent to the stations).

to access said image record of said selected digital image, and to display said image copy with said user selected said recorded manipulations from said image record (Column 8, Lines 61-66 and Column 10, Lines 60-65).

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wherein available said manipulations include move, zoom, rotate, contrast, and annotations (Column 4, Lines 58-67; Column 11, Lines 37-41; Column 32, Lines 8-20) and (Column 29, Lines 47-48, Column 35, Lines 57-60).available said annotations include text, pencil, highlight, point flag, and measure (Column 33, Lines 6-25; Col 33, Lines 10-21).

Though Cooke may not explicitly disclose each button for manipulations and annotations Official Notice is taken that it would have been an obvious technique of improving a device (i.e. adding additional manipulation and annotation buttons) and is part of the ordinary capability of a person skilled in the art. One would have been motivated to include all the edit buttons to provide complete functionality when utilizing the system.

Cooke also does not disclose using image spoolers, however Anderson discloses using image spoolers for the purpose capturing images (Column 6, Lines 35-45). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to use a plurality of image spoolers for the plurality of image capturing devices and devices of the system in the modified Cooke. One would have been motivated to use to image spoolers to provide an efficient and accurate way to mange the images.

Additionally Cooke does not explicitly disclose user interface is configured to associate, in response to user input from said input device, a patient name with said selected

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digital image and to add said patient name to said image record for said selected digital image. However, Echerer discloses a radiographic image enhancement and further discloses identifying a patient to the image for the database (Column 7, Lines 30-41). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to identify the image with information parameters used in Cooke as taught by Echerer. This improves the efficiencies of queries performed by the system.

**Claim 32:** Claim 32 is similar in scope and therefore rejected with the same rationale as Claim 22.

**Claim 40:** Claim 32 is similar in scope and therefore rejected with the same rationale as Claim 22.

### ***Response to Arguments***

10. Applicant's arguments filed 1-9-08 have been fully considered but they are not persuasive.

Applicants argue that dental imaging is done smaller settings than hospitals, however Cooke (Column 6, Lines 13-16), discloses that this system could be used in smaller

venues which could include the places where medical images are used like dental offices.

Applicants also now disclose an image host and catalog service, however these are still considered servers that collect and send out image and patient data; therefore even though Cooke does not name the devices the same they still perform the same actions of retrieving and sending images and patient data.

Applicants also that the devices are independently connected and as shown in Cooke (Figures 1 and 4) the devices are independently connected to the system and they allow the system to retrieve an image and the manipulations independently (Cooke: Column 10, Section 1.4) and the information is transferred over a the network gateway to the multiple reviewing stations.

### **Conclusion**

Applicants amendments necessitated the new ground(s) of rejection presented in this office action. Accordingly, **THIS ACTION IS MADE FINAL**. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherrod Keaton whose telephone number is 571) 270-1697. The examiner can normally be reached on Mon. thru Fri. and alternating Fri. off (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3800.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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SLK

3-14-08

/David A Wiley/

Supervisory Patent Examiner, Art Unit 2174